

**POP-UP IRRIGATION SPRINKLER HAVING BI-LEVEL DEBRIS
STRAINER WITH INTEGRAL RISER RATCHET
MECHANISM AND DEBRIS SCRUBBER**

ABSTRACT OF THE DISCLOSURE

A frusto-conical strainer is mounted on the lower end of a pop-up riser for filtering out debris from water entering the lower inlet end of a surrounding outer housing to prevent clogging of the nozzle orifice or damage to mechanical components within a sprinkler. A cylindrical scrubber including a circumferential array of resilient arms is anchored at the lower inlet end of the outer housing. Wiper blades on the upper ends of the arms press against the outer surface of the strainer to scrape debris and algae therefrom as the riser extends and retracts. The strainer may have finer and coarser mesh sections for different levels of filtering in a sprinkler having multiple internal water flow paths. A plurality of circumferentially spaced projections on the strainer deflect past a plurality of circumferentially spaced ribs formed on the interior wall of the outer housing to provide a riser ratchet mechanism.

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